

molecular beacon, and molecular beacons cause the formation of double-stranded reporter moieties upon hybridization, not upon synthesis of a complement.

II. Indefiniteness

Claims 20-35 were rejected under 35 U.S.C. §112, second paragraph for allegedly being indefiniteness.

A. Regarding Claim 20, it was asserted that the nature of the association among the primers, templates, and newly synthesized nucleic acid molecules is not clear. Claim 20 has been amended to specifically recite two separation steps that are inherent to the claimed method, and recognized by the Examiner.

B. Regarding Claim 22, it was asserted that the term “molecular beacon” is not clear because it is not defined in the claims or specification. However, such a definition is provided at page 8, lines 27-29 of the present application.

C. Regarding Claim 24, it was asserted that the abbreviations SDA, PCR, 3SR, TMA and NASBA should be defined. However, SDA is defined at page 7, lines 6-26 and illustrated in Fig. 1A, and PCR, 3SR, TMA and NASBA are defined at page 11, line 12 - page 12, line 36.

D. Regarding Claim 28, it was asserted that the phrase “specialized sequence” is confusing because it is not clearly defined. It was further asserted that neither “specialized sequence” nor “secondary structure” have antecedent basis in Claim 20. However, “specialized sequence” is defined at page 9, lines 2-8, and neither “specialized sequence” nor “secondary structure” requires antecedent basis in Claim 20, because these terms are used to further define “the reporter moiety” by means of a Markush group.

III. Conclusions

The claims of the present application are believed to be in condition for allowance. The Examiner is urged to telephone the undersigned regarding any further issues regarding this application.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned "Version with Markings to Show Changes Made."

Respectfully submitted,

A handwritten signature in black ink, appearing to read "David W. Highet", with a long horizontal flourish extending to the right.

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claim 21 ~~has~~ been cancelled without prejudice.

Claims 20 and 22 have been amended as follows:

20. (Amended). A method for detecting amplification of a target sequence comprising, in an amplification reaction:

a) hybridizing a signal primer comprising an adapter sequence to the target sequence;

b) extending the signal primer on the target sequence to produce an extension product;

c) separating the extension product from the target sequence;

[c)] d) hybridizing an amplification primer to the extension product and extending the amplification primer to synthesize a complement of the adapter sequence;

e) separating the product including the complement of the adapter sequence from the extension product;

[d)] f) hybridizing to the complement of the adapter sequence a reporter probe comprising a reporter moiety, [whereby] and producing a double-stranded reporter moiety [is produced]; and

[e)] g) detecting the double-stranded reporter moiety as an indication of amplification of the target sequence.

22. (Amended). The method of Claim [21] 20 wherein the reporter is a molecular beacon.